

CLAIMS

1. A method of treating stroke in a patient who has undergone a stroke at least three hours earlier, said method comprising delivering at least 2 million viable neuronal cells to at least one brain area involved in the stroke.
- 5 2. The method of claim 1 further comprising the step of using a twist drill or a burr to provide entry through the skull whereby the cells can be delivered.
3. The method of claim 1 wherein the cells are selected from the group consisting of hNT neuronal cells, neural stem cells, HCN-1 cells, fetal pig cells, neural crest cells or a combination thereof.
- 10 4. The method of claim 1 wherein the stroke has taken place at least three months earlier.
5. A pharmaceutical composition of human neuronal cells, the cells being at least 95% pure, said composition further comprising a vial consisting of PBS and cells, said composition further comprising a container with liquid nitrogen, where-
15 by the composition is frozen to -170°C before use.
6. The pharmaceutical composition of claim 5 in which the cells are hNT cells or neural stem cells.
7. A method of improving speech in a person who has experienced brain damage which interferes with speech, said method comprising injecting a sterile
20 composition of a sufficient number of neuronal cells into the damaged area.
8. The method of claim 7, wherein the brain damage is due to stroke.
9. The method of claim 7, wherein the injected neuronal cells are human neuronal cells or human stem cells.
10. A method of improving motor performance in a person who has experienced
25 brain damage which interferes with movement, said method comprising injecting a sterile composition of a sufficient number of neuronal cells to the damaged area.
11. The method of claim 10, wherein the brain damage is due to stroke.
12. The method of claim 10, wherein the injected neuronal cells are human
30 neuronal cells or neural stem cells.
13. A method of improving cognition in a person who has experienced brain damage which interferes with cognition, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area of the brain.

14. A method of improving sensory function in a person who has experienced brain damage which interferes with sensation, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells to the damaged area.
- 5 15. A method of improving sensory, motor or cognitive function in a person who has experienced brain damage which interferes with those functions, said method comprising delivering a sterile composition of a sufficient number of neuronal cells or neural stem cells a location from which the neuronal cells migrate to the damaged area.
- 10 16. The method of claim 14, comprising delivering the composition to the cisternae.
17. A method of replacing in an individual central nervous system nerves lost to neurodegenerative disease, trauma, ischemia or poisoning, the method comprising administering to the individual a sterile composition of a sufficient
15 number of neuronal cells.